#### NEW PLANT RECORDS FOR CENTRAL TEXAS

### H.L. White & W.C. Holmes

Department of Biology, Baylor University, Waco, Texas 76798-7388 U.S.A.

&

## J.R. Singhurst

Wildlife Diversity Program, Texas Parks and Wildlife Department, Austin, Texas 78704 U.S.A.

#### **ABSTRACT**

The distributions of Chorispora tenella (Brassicaceae), Sedum pulchellum (Crassulaceae), Rhynchospora nivea (Cyperaceae), Hypericum drummondii (Hypericaceae), Samolus ebracteatus var. cuneatus (Primulaceae), Penstemon murrayanus (Scrophulariaceae), and Nicotiana repanda (Solanaceae) in central and north-central Texas are discussed.

KEY WORDS: Chorispora, Sedum, Rhynchospora, Hypericum, Samolus, Penstemon, Nicotiana, Brassicaceae, Crassulaceae, Cyperaceae, Hypericaceae, Primulaceae, Scrophulariaceae, Solanaceae, Texas, biogeography

The following series of notes present noteworthy plant records that augment the known distributions for several species that occur in the central and north-central Texas area or, in one instance, discuss another item of importance.

Chorispora tenella (Pall.) DC. (Brassicaceae), a native of Asia, was reported in Texas by Lipscomb (1984) to occur in the following counties: Dallam, Dallas, Deaf Smith, and El Paso. Diggs et al. (1999) also list Tarrant County. The specimen of C. tenella from McLennan County is noteworthy because it is approximately 175 kilometers south of the nearest record for the species. Chorispora tenella is characterized by its purple-blue petals and rather falcate siliques possessing an elongated beak.

126

Specimen examined: TEXAS. McLennan Co.: FR 1860 at railroad, ca 0.5 mi W of TX Hwy 6, 7.5 mi ESE of Waco, 2 Apr 1996, Denham 64 (BAYLU).

Sedum pulchellum Michx. (Crassulaceae). The distribution of this species, given by Diggs et al. (1999) and largely based upon White et al. (1998a), does not include Palo Pinto and Bosque counties, both of which are included in White et al. (1998a). While the omission of these two counties could be considered an oversight on the part of Diggs et al. (1999), it is equally possible to assume that Diggs et al. (1999) consider the report of the species in these two counties to be in error since their manual references White et al. (1998a) as the source of the distribution. However, it is clear that neither possibility is correct. The distribution cited by Diggs et al. (1999) is based upon the original manuscript submitted to Sida on 5 March 1998 for consideration for publication, which was released to and used by Diggs et al. (1999) without the permission or knowledge of the authors of White et al. (1998a). The 5 March manuscript did not have the Palo Pinto and Bosque county records because they were not collected until a much later date (see exsiccatae). Both records were added to the revised manuscript, submitted in September 1998, and subsequently published. Thus, the two county records are valid.

Specimens examined: TEXAS. Bosque Co.: intersection of Brazos River and Cedar Creek, 97.32808° N, 31.78761° W, 31 May 1998, Branch 300 (BAYLU). Palo Pinto Co.: 3.3 mi N of jct Hwy 287 and FM 3027 on Hwy 287, 1.7 mi WSW of Grantham Cemetery, 11 Apr 1998, Singhurst 6593 (BAYLU).

Rhynchospora (Dichromena) nivea (Boeck.) Britt. (Cyperaceae) tolerates both sandy and clayey soils along streams, on flats, and in depressions, in the shelter of boulders, thickets and wooded ravines in Arkansas, Oklahoma, and Texas (Correll & Johnston 1970). It occurs on the Edwards Plateau, in south Texas, and adjacent states in México (Correll & Johnston 1970). Diggs et al. (1999) list Bell, Brown, Burnet, and Parker counties for the distribution of R. nivea within the area treated by their manual, but also state that the species was collected along Turtle Creek. Dallas (Austin Chalk) in 1881 or 1882 by Reverchon. At the time, Reverchon noted that R. nivea was "very rare" and it has not been found there since (Thomas 1984; Mahler 1988). The following record for this species is interesting because of two other plants found in the same area: Tillandsia recurvata L. (Bromeliaceae; White et al. 1998b) and Samolus ebracteatus Kunth var. cuneatus (Small) Kunth (see below), both of which are unusual for Hill County.

Specimen examined: TEXAS. Hill Co.: wet limestone cliff on E bank of Brazos River below Lake Whitney dam, 97.36468° N, 31.86605° W, 11 Jun 1998, White 526 (BAYLU).

Hypericum drummondii (Grev. & Hook.) Torrey & Gray (Hypericaceae) is known from Florida to Texas and northward to Maryland, West Virginia, Ohio, Indiana, southern Illinois, Iowa, and southeastern Kansas (Correll & Johnston 1970). Within Texas, H. drummondii is found in the central and eastern parts of the state, primarily in dry, sandy, or gravelly soils in abandoned fields, open scrub oak and

cedar-oak woods (Correll & Johnston 1970). Hatch et al. (1990) indicate the species is known from all vegetational regions within Texas except the Blackland Prairies, High Plains, and Trans-Pecos. Diggs et al. (1999) give a rather puzzling distribution for the species in the territory treated by their manual—"in nc TX either in the Cross Timbers or on the sandy soils at the extreme e margin of the area..." It is not clear if they are reporting H. drummondii in only one or both areas. The following specimens are the first documentation of the species in the Blackland Prairies.

Specimens examined: TEXAS. Falls Co.: Between road and lake on E side of Lake Marlin, 20 Sep 1985, Gordon s.n. (BAYLU). McLennan Co.: Abandoned pasture off FM 308, ca 1.5 mi SW of Elm Mott, 24 Oct 1998, Holmes 9831 (BAYLU).

Samolus ebracteatus Kunth var. cuneatus (Small) Kunth (Primulaceae) occurs on wet limestone, in marshes, seepage areas, and in moist soil along streams west from central Texas to New Mexico, south to the Rio Grande Plains, and north to northern Oklahoma (Correll & Correll 1972). Hatch et al. (1990) give the distribution for S. ebracteatus var. cuneatus in Texas as all vegetational regions except the Pineywoods, Post Oak Savannah, and Blackland Prairies. Diggs et al. (1999) list Wise and Palo Pinto counties for north-central Texas. The specimens from Bosque and Hill counties, cited below, expand the known distribution for the species in the north-central region of the state.

Specimens examined: TEXAS. Bosque Co.: Cedar Creek at Brazos River, massive limestone cliff, 97.32808° N, 31.78761° W, 11 Jun 1998, White 531 (BAYLU). Hill Co.: Wet limestone cliff on E bank of Brazos River below Lake Whitney dam, 97.36468° N, 31.86605° W, 11 Jun 1998, White 520 (BAYLU).

Penstemon murrayanus Hook. (Scrophulariaceae) occurs in sandy soil throughout east Texas, adjacent Choctaw County, Oklahoma; Oauchita and Nevada counties, Arkansas; and Caddo and Winn parishes, Louisiana (Morgan 1995). Thomas & Allen (1998) also report the species as occurring in Natchitoches Parish, Louisiana. Hatch et al. (1990) cite the species as occurring in the Edwards Plateau, but Morgan (1995) mentions that the record is probably based upon seeds collected in Wilson County that were cultivated in an agricultural laboratory in Bexar County. For the area treated by their manual, Diggs et al. (1999), list Henderson County and Ellis County (also cited by Mahler 1988). The Parker County specimen extends the known distribution of the species about 130 km from its nearest previously known station in Ellis County. This is also the first report of the species in the West Cross Timbers.

Specimen examined: TEXAS. Parker Co.: Peaster, May 1931, Wiggins s.n. (TEX).

Nicotiana repanda Willd. ex Lehmann (Solanaceae) occurs in southernmost Texas and the adjacent Mexican states of Nuevo León and Tamaulipas (Goodspeed 1954). This species is locally common in creek beds on the Edwards Plateau, but rare in north-central Texas (Correll & Johnston 1970). Mahler (1988) cites a specimen

collected by Letterman in Dallas County, but notes that it has "not [been] found there recently." Hatch et al. (1990) list the Gulf Prairies and Marshes, Blackland Prairies, South Texas Plains, and Edwards Plateau vegetational regions for this species. Nicotiana repanda was recently discovered growing beneath a limestone overhang near the Brazos River in Bosque County (see exsiccata below), which is the first report of the species in the Cross Timbers and Prairies as delineated by Correll & Johnston (1970) and Hatch et al. (1990).

Specimen examined: TEXAS. Bosque Co.: Cedar Creek at Brazos River, beneath massive limestone overhang, 97.32808° W, 31.78761° N, 11 Jun 1998, White 535 (BAYLU).

#### ACKNOWLEDGMENT

We wish to thank the Herbarium of the University of Texas (TEX), Austin for access to the Penstemon murrayanus specimen from Parker County.

# REFERENCES

Correll, D.S. & M.C. Johnston. 1970. Manual of the Vascular Plants of Texas. Texas Research Foundation, Renner, Texas.

Correll, D.S. & H.B. Correll. 1972. Aquatic and Wetland Plants of the Southwestern United States. Stanford University Press, Stanford, California.

Diggs, G.M., B.L. Lipscomb, & R.J. O'Kennon. 1999. Shinners' and Mahler's Illustrated Flora of North Central Texas. Botanical Research Institute of Texas, Fort Worth, Texas.

Goodspeed, T.H. 1954. The Genus Nicotiana--origins, relationships and evolution of its species in the light of their distribution, morphology and cytogenetics.

Chronica Botanica Co., Waltham, Massachusetts.

Hatch, S.L., K.N. Gandhi, & L.E. Brown. 1990. Checklist of the Vascular Flora of Texas. Texas Agric. Exp. Sta. MP-1655, Texas A&M University, College Station, Texas.

1984. New additions or otherwise noteworthy plants of Texas. Lipscomb, B.L.

Sida 10:326-327.

Mahler, W.F. 1988. Shinners' Manual of the North Central Texas Flora. Botanical Research Institute of Texas, Inc., Forth Worth, Texas.

Morgan, T.L. 1995. The distribution of Penstemon murrayanus in Texas and surrounding states. In Symposium Proceedings, "The tallgrass prairies and its many ecosystems." Native Plant Society of Texas, Waco, Texas.

Thomas, R.D. & C.M. Allen. 1998. Atlas of the Vascular Flora of Louisiana, vol. 3:

Dicotyledons, Fabaceae--Zygophyllaceae. Louisiana Dept. Wildlife and Fisheries,

Baton Rouge, Louisiana.

Thomas, W.W. 1984. The systematics of Rhynchospora section Dichromena. Mem. New York Bot. Gard. 37:1-116.

White, H.L., J.R. Branch, W.C. Holmes, & J.R. Singhurst. 1998a. Comments on the distribution of Sedum pulchellum (Crassulaceae) in Texas. Sida 18:623-626.
White, H.L., J.R. Branch, & W.C. Holmes. 1998b. Comments on the distribution of Tillandsia recurvata L. (Bromeliaceae) in Texas. Phytologia 84:93-97.